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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Bon-Chul Koo

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EXAMINER

KHAN, ASIF H

ART UNIT

PAPER NUMBER

2616

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/509,526	<b>Applicant(s)</b> KOO, BON-CHUL	
	<b>Examiner</b> ASIF H. KHAN	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This communication is in response to the RCE filed on 07/18/2008. With reference to the Final Office Action dated 04/17/2008, appropriate correction to the drawings have been made. Corrections with reference to the claim objections have also been made. Amendment to claims 1, 4, 5, 9, and 10, have been made. Claims 1-11, are now pending in the application.

### ***Claim Objections***

2. **Claim 4**, is objected to because of the following informalities:

Claim 4, lines 5-6 , “the the IP address” should be “the IP address”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-11**, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Regarding claims 1, 4, 5, 7, and 10**, “asynchronous transfer mode (ATM) pool number” is not precisely defined in the specification and it’s correlation with the ID number of the access-requested terminal is ambiguous and vague. The Examiner after doing a reasonably extensive search on the term “ATM pool number” including using

Art Unit: 2616

EAST, Google and other Non-Patent Literature databases for the search, has been unable to find a definition or meaning of the term as claimed by the applicant. The applicant therefore is obligated to provide documentary evidence showing the definition or meaning of the term as claimed. For the purpose of advancing the prosecution of this case the Examiner will interpret “ATM pool number” as a “channel number” or “circuit number”.

***Claim Rejections - 35 USC § 103***

5. **Claim 1**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (Pub. #US 2001/0004361).

**Regarding claim 1**, Kobayashi teaches a telephone controller (“apparatus”), for an Internet-based (“web-based”) phone service (see e.g., [0009], lines 1-3, and [0002], for a telephone controller for Voice over IP (VoIP) connected to the Internet via a LAN), comprising:

a memory means for storing and managing an identification (ID) number of a terminal (see e.g., [0011], for memory in which a table stores and manages ID numbers of telephones (“terminals”));

a transmission means for retrieving an ID number of an access-requested terminal from the memory means when the access-requesting terminal requests a web-phone service with the access-requested terminal (see e.g., [0027], lines 1-6, for a communication means for the access-requesting telephone connecting via the network, for receiving the ID number associated with the IP address of the access-requested

Art Unit: 2616

telephone from the memory storing the ID numbers), transmitting the ID number of the access-requested terminal to an Internet Protocol (IP) control means, receiving an allocated IP address of the access-requested terminal from the IP control means and transmitting the allocated IP address to the access-requesting terminal (see e.g., FIG. 1, elements 110 (CONTROL CIRCUIT) and 122 (IP ADDRESS ALLOCATING CIRCUIT), and [0027], lines 6-13, and 16-19, for the IP control circuit directing the IP allocation circuit to output an IP address that is associated with the ID number of the telephone, to the access-requesting terminal);

the IP control means for determining whether an IP address is allocated to the access-requested terminal and controlling an IP address allocation means to allocate an available IP address to the access-requested terminal (see e.g., [0025], lines 3-8, and FIG. 1, showing the IP control circuit 110 retrieves the table 131, for determining the IP address of the access-requested telephone and acquires the IP address from the IP address allocating circuit 122 to assign it to the access-requested telephone ("terminal") which does not have an IP address already assigned).

Kobayashi does not explicitly teach using an asynchronous transfer mode (ATM) pool number corresponding to the ID number of the access-requested terminal.

However, ATM pool number is another form of an identification number for a channel or circuit that is associated with the ID number of the terminal, and Kobayashi teaches the extension telephone number (see e.g., FIG. 5, element 412, and [0025], lines 9-11), which would correspond to an ATM pool number, since it is also another form of a circuit or channel identification number.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the applicant's invention was made to use an ATM pool number (or any other circuit or channel identification number) corresponding to the ID number of the access-requested terminal, in order to correlate the identification information of the terminal, for verification and authentication purposes.

Kobayashi further discloses the IP address allocation means for allocating an available IP address to the access-requested terminal which does not have an assigned IP address and reporting the allocated IP address to the IP address controlling means (see e.g., FIG. 1, elements 110 (CONTROL CIRCUIT) and 122 (IP ADDRESS ALLOCATING CIRCUIT); [0027], lines 9-13, and [0038], lines 1-7, for the IP address allocating circuit providing an available IP address to the access-requested telephone without an assigned IP address and notifying the control circuit about it).

6. **Claims 2 and 3**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi, in view of Mattaway et al. (U.S. Patent #6,272,129), herein after referred to as Mattaway.

**Regarding claims 2 and 3**, as applied to **claim 1** above, Kobayashi discloses the claimed invention above, but does not explicitly teach that the apparatus for web-phone service further comprises a web information storage means for storing and managing Internet contents of contents providers, and the access-requesting terminal is a terminal of Internet contents provider which provides Internet contents.

However, Mattaway in an analogous art teaches a Web Server 260 (e.g., see col. 9, lines 46-53), for storing and managing contents of Internet content providers (see col.

Art Unit: 2616

6, lines 48-51), as well as a computer system ("terminal") connected on the network providing Internet contents (see e.g. col. 9, lines 62-65), for the purpose of sharing Internet data over a digital communications link.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the applicant's invention was made to combine a Web Server and an access-requesting Internet content terminal taught by Mattaway, within the network setup disclosed by Kobayashi to provide web-based contents as an enhancement to the functionality of the Web-phone system.

7. **Claim 4**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi of record, in view of Voit et al. (U.S. Patent #6,829, 250), hereinafter referred to as Voit.

**Regarding claim 4**, as applied to **claim 1**, Kobayashi discloses wherein the IP control means controls the IP address allocation means to forcibly allocate an available IP address by using an ATM pool number corresponding to the ID number of the access requested terminal (see e.g., [0027], lines 7-11, showing IP control circuit 110 of the telephone controller outputs an IP address allocation instruction to the IP address allocating circuit 122, upon which it creates an IP Address not used in the telephone ("terminal"), by using an extension telephone number ("ATM pool number") linked to the ID number), extracts the IP address corresponding to the ID number, stores the IP address as a form of database (see e.g., [0027], lines 17-21, teaching the creation of an IP address which corresponds to an extension telephone number linked to the ID number, the created entry being stored in the data structure of table 131), and returns

Art Unit: 2616

the IP address upon an access request from the transmission means (see e.g., [0036], teaching the IP address is transmitted to the interface in response to the access request).

Kobayashi does not explicitly disclose allocating the available IP address to a virtual channel.

However, in the same field of endeavor, Voit teaches allocating the available IP address to a virtual channel (see e.g., col. 10, lines 35-39, for correlation between an assigned IP address and a virtual circuit identifier).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the applicant's invention was made to incorporate the allocation of an IP address to a virtual channel as taught by Voigt, within the IP address allocation means as taught by Kobayashi to provide compatibility with ATM circuits in a web-based phone service.

8. **Claims 5, and 7-9,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dynarski et al. (U.S. Patent #6,272,129), hereinafter referred to as Dynarski.

**Regarding claim 5,** Dynarski teaches a method of locating and connecting a mobile wireless communication device on a packet switched network, such as the Internet accessed from a remote terminal ("web-phone service") (see e.g., ABSTRACT, lines 1-3, and col. 6, lines 54-58), by

a) extracting a machine identification number (MIN) associated with the mobile device ("access-requested terminal") from a mobile node location server ("phone number domain (PND)") (see e.g., col. 7, lines 40-43 and 45-47, for obtaining an IMSI



Art Unit: 2616

(International Mobile Station Identity number) ("MIN") from the server 30A) and transferring the Identity number ("MIN") to another server also referred to as a Foreign Agent ("requested IP broker (RIB)") in response to an Access Request message received from the remote terminal ("request for web-phone service") (see e.g., col. 7, line 67- col. 8, line 2);

b) determining whether an IP address is allocated to the access-requested terminal at the RIB (see e.g., col. 7, lines 45-53, for checking a table used for mapping IP addresses to machine identification numbers, if a useable IP address has been assigned for accessing the mobile node ("access requested terminal") at the server ("RIB");

c) controlling a network access server (NAS) to allocate an IP address to the access-requested terminal by using a unique identification number corresponding to the MIN of the access-requested terminal in case that the access-requested terminal has no IP address (see e.g., col. 8, lines 9-13 and col. 7, lines 40-43, for initiating a connection with the Network Access Server to allocate the IP address for connection of the mobile node to the network, the IP address being mapped to unique identifiers related to the machine identification numbers).

Dynarski does not explicitly teach using an asynchronous transfer mode (ATM) pool number corresponding to the ID number of the access-requested terminal.

However, the ATM pool number is simply another form of a channel or circuit identification number that is associated with the ID number of the terminal, and Dynarski teaches the IMSI (international Mobile Station Identity number) or ESN (Electrical Serial

Art Unit: 2616

Number) (see e.g., col. 5, lines 48-54, and col. 7, lines 24-29), which would correspond to an ATM pool number, since either of them is also another form of a channel or circuit identification number.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the applicant's invention was made to use an ATM pool number (or any other channel or circuit identification number) corresponding to the ID number of the access-requested terminal, in order to correlate the identification information of the terminal, for verification and authentication purposes.

Dynarski further discloses:

d) transferring the allocated IP address of the access-requested terminal from the RIB to the access-requesting terminal through the PND to establish a connection between the access- requesting terminal and the access-requested terminal (see e.g., col. 7, line 67- col. 8, line 2, showing the IP address of the mobile node ("access-requested terminal") is forwarded from the Foreign Agent ("RIB") to the mobile node location server ("PND") to establish a connection from the mobile node to the remote terminal).

**Regarding claim 7**, as applied to **claim 5**, wherein at the step b), if the access-requested terminal does not have an allocated IP address, at the step c), the NAS is controlled to allocate an available IP address to the access-requested terminal by using a unique identifier ("ATM pool number") corresponding to the MIN of the access-requested terminal and the NAS transfers the IP address to the RIB (see e.g., col. 8, lines 41-51, teaching the Network Access Server is connected thru the network to

Art Unit: 2616

another server ("RIB") to which it can transfer the available IP address that is mapped to a unique identifier ("ATM pool number") for the mobile node ("access requested terminal").

**Regarding claim 8**, as applied to **claim 5**, Dynarski discloses:

e) transferring the allocated IP address of the access-requested terminal from the RIB to the access-requesting terminal through the PND and establishing a connection between the access-requesting terminal and the access-requested terminal in case that the access-requested terminal already has an allocated IP address at the step b) (see e.g., col. 7, line 67- col. 8, line 2, showing the available IP address of the mobile node is forwarded from the Foreign Agent ("RIB") to the mobile node location server ("PND") to establish a connection from the mobile node to the remote terminal when the mobile node ("access requested terminal") already has an IP address assigned).

**Regarding claim 9**, as applied to **claim 5** above, Dynarski discloses:

wherein the RIB controls the NAS to forcibly allocate an available IP address, which is not used, extracts IP address corresponding to the MIN of the user, and stores the IP address as a form of database so as to return the IP address upon an access request of the PND (see e.g., col. 8, lines 42-48, showing the Foreign Agent (RIB) controls the Network Access Server (NAS) to assign an available IP address that is mapped to the machine identification numbers, and col. 13, lines 35-42, for the use of a dynamic call database storing the machine identification numbers (that correspond to the available IP addresses) that can be looked up to find the records when an access request is made (activate the call)).

Art Unit: 2616

9. **Claims 6, 10, and 11**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dynarski, in view of Mattaway.

**Regarding claim 6**, as applied to **claim 5** above, Dynarski discloses the claimed invention above but does not expressly disclose wherein the access-requesting terminal is a terminal of Internet contents provider which provides Internet contents.

However, Mattaway in an analogous art teaches a computer system (“terminal”) connected on the network providing Internet contents (see e.g., col. 9, lines 62-65), for the purpose of sharing Internet data over a digital communications link.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the applicant’s invention was made to combine the Internet contents functionality of an end terminal taught by Mattaway, to the remote terminal disclosed by Dynarski, to provide an attractive web-content feature in a connected terminal.

**Regarding claim 10**, Dynarski teaches the limitations:

a) extracting a machine identification number (MIN) of an access-requested terminal from a phone number domain (PND) and transferring the MIN to a requested IP broker (RIB) when an access-requesting terminal requests an access to the web-phone (see e.g., col. 7, lines 40-43 and 45-47, for obtaining an IMSI (International Mobile Station Identity number) (“MIN”) from the server 30A) and transferring the Identity number (“MIN”) to another server also referred to as a Foreign Agent (“requested IP broker (RIB)”) in response to an Access Request message received from the remote terminal (“request for web-phone service”) (see e.g., col. 7, line 67- col. 8, line 2);

Art Unit: 2616

b) determining whether an IP address is allocated to the access-requested terminal at the RIB (see e.g., col. 7, lines 45-53, for checking a table used for mapping IP addresses to machine identification numbers, if a useable IP address has been assigned for accessing the mobile node ("access requested terminal") at the server ("RIB");

c) controlling a network access server (NAS) to allocate an IP address to the access-requested terminal by using an ATM pool number corresponding to the MIN of the access-requested terminal in case that the access-requested terminal is inactive and has no IP address (see e.g., col. 8, lines 9-13, and col. 7, lines 40-43, for initiating a connection with the Network Access Server to allocate the IP address for connection of the mobile node to the network, the IP address being mapped to unique identifiers ("ATM pool number") related to the machine identification numbers); and

d) transferring the allocated IP address of the access-requested terminal from the RIB to the access-requesting terminal through the PND to establish a connection between the access-requesting terminal and the access-requested terminal (see e.g., col. 7, line 67- col. 8, line 2, showing the IP address of the mobile node ("access-requested terminal") is forwarded from the Foreign Agent ("RIB") to the mobile node location server ("PND") to establish a connection from the mobile node to the remote terminal).

Dynarski does not expressly disclose the use of a computer readable recording medium.

However, Mattaway teaches the implementation of embodiments comprising a series of instructions on computer readable media on a computer system (a microprocessor being an inherent part of it) (see e.g., col. 11, lines 57-62).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the applicant's invention was made to combine computer readable medium including a microprocessor (use of a computer system) taught by Mattaway, to the method disclosed by Dynarski, to provide portable and adaptable computer-based functionality of the web-phone service.

**Regarding claim 11**, as applied to **claim 10** above, Dynarski in view of Mattaway further discloses:

transferring the allocated IP for the access-requested terminal to the access-requesting terminal and establishing a connection between the access-requesting terminal and the access-requested terminal at the RIB in case that the access-requested terminal already has an allocated IP at the function b) (see e.g., Dynarski: col. 7, line 67- col. 8, line 2, showing the available IP address of the mobile node is forwarded from the Foreign Agent ("RIB") to the mobile node location server ("PND") to establish a connection from the mobile node to the remote terminal when the mobile node ("access requested terminal") already has an IP address assigned).

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Roh (Patent #US 7,032,012), and Keller-Tuberg (Patent #US 6,504,844), references are also cited to show related art.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASIF H. KHAN whose telephone number is (571) 270-1955. The examiner can normally be reached on Monday to Friday: 8:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/509,526

Page 15

Art Unit: 2616

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